

Title (en)
Refrigerator

Title (de)
Kühlschrank

Title (fr)
Réfrigérateur

Publication
EP 2765372 A2 20140813 (EN)

Application
EP 14152829 A 20140128

Priority
KR 20130015016 A 20130212

Abstract (en)
A refrigerator includes a main body (4) having a storage room (2) formed therein, a door (6) that opens and closes the storage room (2), a filter module (8), and a cool air circulation fan (10) that circulates cool air through the filter module (8). The filter module (8) includes a metal photocatalyst filter (30) and a UV LED module for radiating UV rays to the metal photocatalyst filter (30). The metal photocatalyst filter (30) has photocatalysts made of one of ZnTiO₂, CuTiO₂, AgTiO₂ or FeTiO₂ coated on a filter base. The filter module (8) may allow the entire storage room (2) to be uniformly subject to antibiosis and sterilization at a relatively low cost.

IPC 8 full level
F25D 17/04 (2006.01); **B01D 53/88** (2006.01); **B01J 23/06** (2006.01); **B01J 23/50** (2006.01); **B01J 23/72** (2006.01); **B01J 23/745** (2006.01); **B01J 35/00** (2006.01); **B01J 35/04** (2006.01); **B01J 35/06** (2006.01); **B01J 37/02** (2006.01)

CPC (source: EP KR US)
A61L 9/205 (2013.01 - KR); **B01D 46/0028** (2013.01 - KR); **B01D 53/885** (2013.01 - EP US); **B01J 23/06** (2013.01 - EP US); **B01J 23/50** (2013.01 - EP US); **B01J 23/72** (2013.01 - EP US); **B01J 23/745** (2013.01 - EP US); **B01J 35/39** (2024.01 - EP US); **F25D 11/00** (2013.01 - KR US); **F25D 17/042** (2013.01 - EP KR US); **F25D 17/06** (2013.01 - KR); **F25D 27/00** (2013.01 - KR US); **B01D 2255/104** (2013.01 - EP US); **B01D 2255/20707** (2013.01 - EP US); **B01D 2255/20738** (2013.01 - EP US); **B01D 2255/20761** (2013.01 - EP US); **B01D 2255/20792** (2013.01 - EP US); **B01D 2255/802** (2013.01 - EP KR US); **B01D 2257/91** (2013.01 - EP US); **B01D 2258/06** (2013.01 - EP US); **B01D 2259/804** (2013.01 - EP US); **B01J 35/56** (2024.01 - EP US); **B01J 35/58** (2024.01 - EP US); **B01J 37/0225** (2013.01 - EP US); **F25D 2317/0417** (2013.01 - EP KR US); **F25D 2323/0024** (2013.01 - KR)

Cited by
EP3892360A1; EP3338040A4; FR3078262A1; US10712084B2; US10180248B2; EP3401622A4; WO2019037983A1; WO2019166545A1; WO2022219356A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2765372 A2 20140813; **EP 2765372 A3 20170301**; **EP 2765372 B1 20200708**; AU 2014200525 A1 20140828; AU 2014200525 B2 20160121; CN 103983069 A 20140813; CN 103983069 B 20160921; KR 101822891 B1 20180129; KR 20140101629 A 20140820; US 2014245771 A1 20140904; US 9803910 B2 20171031

DOCDB simple family (application)
EP 14152829 A 20140128; AU 2014200525 A 20140130; CN 201410048981 A 20140212; KR 20130015016 A 20130212; US 201414176369 A 20140210